AMAUROTIC FAMILY IDIOCY. M. Frank (Journal A. M. A., January 20).

Frank reports briefly a case of this condition, describes the characteristic fundus changes and reviews the literature regarding them. The characteristic ocular symptoms which remain unaltered through the course of the disease, consist in a nebulous grayish-white area surrounding the macula about three times the size of the disc, somewhat oval in shape, with the major axis horizontal, and gradually blending at the edges with the normal fundus. At its center, coinciding with the fovea but larger, is a clearly defined dark red or liver-colored spot. Surrounding this can be seen the tiny retinal vessels. Strabismus and nystagmus have been observed in some cases. There is no recorded regularity in the pupillary conditions. The other symptoms of the disease, the marasmus, the mental failure, and ultimate paralysis, together with the hereditary or family tendency are mentioned, together with the optic atrophy and blindness. Frank attributes the pathognomonic eye changes to swollen and degenerated ganglion cells rather than to an edema; the constancy of the phenomenon and the lack of veiling of the vessels are against edema. He summarizes the cases reported up to date, 54 in all, with 22 others referred to. Where race data were given the great majority are Jews. There have been 12 post-mortems, and in 6 cases the eyes were microscopically examined.

HYDROTHERAPY IN EPILEPSY. Guy Hinsdale. (Journal A. M. A., January 20).

The author reviews the literature regarding hydrotherapv in the treat of epilepsy. In this country attention was first called to its value in this disease by Dr. Simon Baruch and the late Dr. G. W. Foster, of the Government Asylum for the Insane. Systematic treatment by this method is being instituted in the New York State Asylum for Epileptics at Sonyea, and the results are looked for with interest. Hinsdale believes that, as warm baths aid in the therapeutic administration of the iodids, they will also aid in the administration of the bromids. To some extent the treatment must of course be individual, and more benefit might be expected in cases of so-called idiopathic epilepsy, alcoholic epilepsy and in cases arising from intestinal intoxication than in focal or traumatic epilepsy. The difficulties in private practice also would be greater than in institutions, as long-continued, systematic treatment and unbounded patience will be required. Its value will be as an auxiliary method, modifying the dosage and aiding the action of the bromids. It will also be an excellent hygienic measure, favoring the action of the skin and improving the general tone of the system.

TRAUMATIC DEGENERATION AND REGENERATION OF THE SPINAL CORD.

That partial regeneration of the spinal cord seems to occur appears to have been established in Stewart's case, in which he sutured the cord after it had been completely severed bv a bullet, and in the case recently reported by Dr. George R. Fowler before the American Medical Association. A timely experimental investigation of this subject has been made by A. Fickler (*Deut. Zeitsch. f. Nervenheil,* July 13, 1905), who experimented on the lower animals. He subjected these to various traumatisms, involving the spinal column and cord, and also studied the result of action of part of the latter. His conclusions are as follows: There is no doubt of the occurrence in man of a transient paralysis of the spinal cord from trauma, without any injury of the spinal column or gross changes in the cord.

The protection afforded by the muscles, spinal column, veins and fatty tissue, together with the dura, is considerable. The same clinical picture can be produced experimentally in animals. The concussion imparted to the cord is a swinging movement. The paralysis is not the result merely of the concusson, but is the result of the milder form of contusion of the cord; the resulting total paralysis and the rapid recovery from the same are to be explained on the basis of variations in the axis-cylinder, and not of molecular alterations. The lesion in the cord is circumscribed, and more marked at the point of contrecoup than at the point of application of violence. If the place of contrecoup is at the foramen magnum then a lesion of the cord does not occur. Apart from the localities of coup and contrecoup the extent of contusion is also determined by the varying consistency of the cord itself. The motion imparted to the cord by a blow is transmitted chiefly in the direction of the blow through the cord, losing in intensity as it proceeds from the point of impact; small waves also start radially from this point. The amount of contusion is proportional to the degree of trauma, the distance from its point of application and the resistance offered by the various tissue elements. The least resistant tissue is the nervous tissue; the blood vessels are the most resistent. Only in the case of opening up of the central canal does a flow of lymph have any destructive rôle. Central hemorrhages occur only with a damage of the nervous tissue, and only when the central veins are in the direction of the line of injury. Thombosis has little to do with the genesis of traumatic lesions of the cord. The vascular changes appear to cause only late forms of spinal apoplexy. As the results of the study of the process of regeneration in the spinal cord the author notes the following: The regenerative phenomena following experimental lesions of the cord in animals are not as marked as those following compression of the cord in human beings. Section of the white substance between the anterior horns and the periphery is followed by regeneration of reserve fibers above and below the plant of section. A regeneration of ganglion cells in the cord has not yet been observed. Regeneration of nerve fibers occurs in many diverse diseases of the cord, whether the disease has already run its course or whether it is slowly developing, it occurs in traumatisms, compressions, syringomyelia and in transverse and disseminate myelitis. It does not occur in the columnar degenerations and in multiple sclerosis. In order that regeneration may occur it is necessary that the ganglion cell should be intact. The first evidence of regeneration is seen one week after the section, and this process proceeds slowly. Only a comparatively small number of fibers are restored. The functional result is not a very considerable one. The best conditions for a restoration of function in the anterior part of the cord are afforded by compression, which leaves intact the central veins and the general configuration of the cord. A regeneration proceeding from the posterior roots in compression has not yet been found, and probably can not occur, since the cause of injury of the cord is a caries of the vertebrae, which causes tuberculous ulceration of the ganglia on the posterior roots; in which case no regeneration can occur.

JELLIFFE.

FUNCTIONAL PSYCHOSES. E. Mendel (Deut. Med. Woch., xxxi., No. 44).

The author emphasizes the importance of medical watchfulness for the children of nervous parents, and of careful regulation of the manner of living, especially if the children show any nervous tendency. It is often wise, especially as puberty approaches, to take such children away from a home where the atmosphere is not favorable for combating the tendency and place them in the country or in a small town, where the life will be simpler. Their diet should consist largely of eggs, milk and fruit. In case of sleeplessness drugs should be a last resort after massage and hydrotherapeutic measures have been thoroughly tried. A patient who refuses food may sometimes be tempted to eat when unobserved if a glass of milk or crackers and bouillon are left on a table near his bed. Patients who soil themselves should be taken to the closet frequently, and the amount of fluid ingested restricted. For melancholia he depends chiefly upon opium, gradually increasing the doses and then decreasing. His maximum dose is 1 gm., supplemented by rest in bed and strengthening diet. JELLIFFE.